ALGE-TIMING

Tiny 2

Manual
SWIM TRAINER

Important Information

General

Before using your ALGE-TIMING device read the complete manual carefully. It is part of the device and contains important information about installation, safety and its intended use. This manual cannot cover all conceivable applications. For further information or in case of problems that are mentioned not at all or not sufficiently detailed, please contact your ALGE-TIMING representative. You can find contact details on our homepage www.alge-timing.com

Safety

Apart from the information of this manual all general safety and accident prevention regulations of the legislator must be taken into account.
The device must only be used by trained persons. The setting-up and installation must only be executed according to the manufacturer's data.

Intended Use

The device must only be used for its intended applications. Technical modifications and any misuse are prohibited because of the risks involved! ALGE-TIMING is not liable for damages that are caused by improper use or incorrect operation.

Power supply

The stated voltage on the type plate must correspond to voltage of the power source. Check all connections and plugs before usage. Damaged connection wires must be replaced immediately by an authorized electrician. The device must only be connected to an electric supply that has been installed by an electrician according to IEC 60364-1. Never touch the mains plug with wet hands! Never touch live parts!

Cleaning

Please clean the outside of the device only with a smooth cloth. Detergents can cause damage. Never submerge in water, never open or clean with wet cloth. The cleaning must not be carried out by hose or high-pressure (risk of short circuits or other damage).

Liability Limitations

All technical information, data and information for installation and operation correspond to the latest status at time of printing and are made in all conscience considering our past experience and knowledge. Information, pictures and description do not entitle to base any claims. The manufacturer is not liable for damage due to failure to observe the manual, improper use, incorrect repairs, technical modifications, use of unauthorized spare parts. Translations are made in all conscience. We assume no liability for translation mistakes, even if the translation is carried out by us or on our behalf.

Disposal

If a label is placed on the device showing a crossed out dustbin on wheels (see drawing), the European directive 2002/96/EG applies for this device.
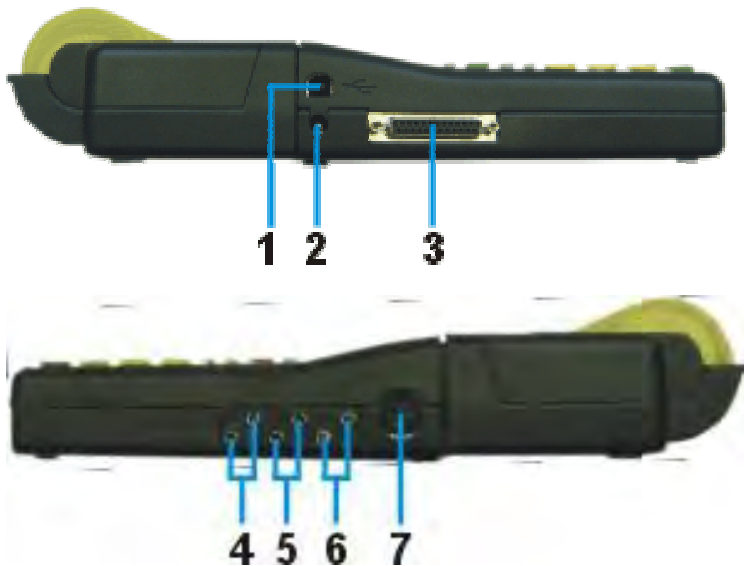Please get informed about the applicable regulations for separate collection of electrical and electronical waste in your country and do not dispose of the old devices as household waste. Correct disposal of old equipment protects the environment and humans against negative consequences!

Copyright by ALGE-TIMING GmbH

Control elements

paper roll
thermo printer
printer hood
LCD graphic display
silicon keyboard

1 2 3

4 5 6 7

1   USB-interface
2   Charging socket
3   ALGE multiport
4   Connection for displayboard
5   Connection for start emitter (C0)
6   Connection for finish emitter (C1)
7   Standard ALGE photocell socket

Table of contents
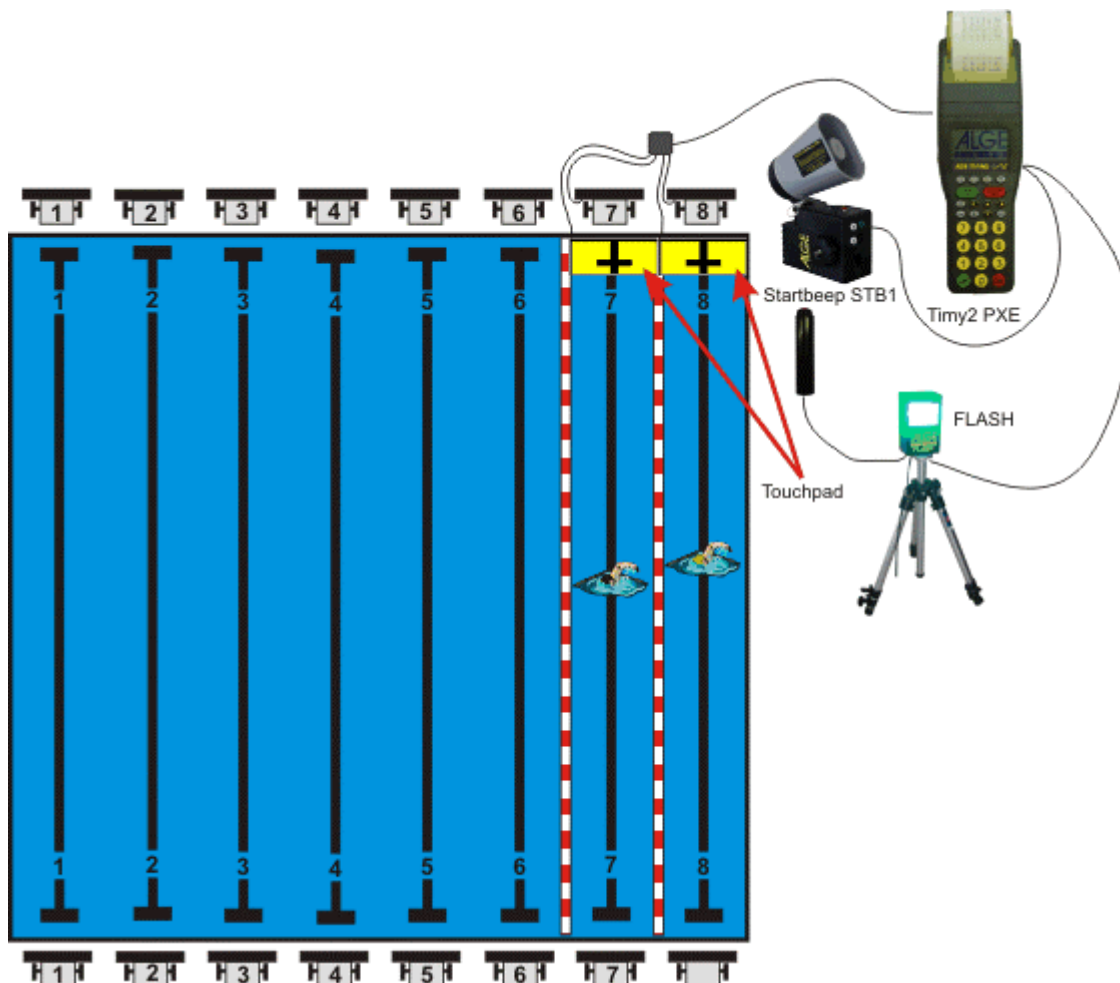
1   Program Description

ALGE-TIMING has developed special software for the TIMY2 which is used by several swimming teams for the performance testing of specific things like turn-time, reaction, relay takeoff, etc. The program SWIM-TRAINER can work with two lanes.

Training for swimming:

Reaction time	Time when swimmer effects the first horizontal pressure on the block
Block-Off Time	Time when swimmer leaves the block
Touch 1	First touch
Turn time	Time from touch to release of the pad
Touch 2	.....

Training for Relay:

Reaction time	Time when swimmer effects the first horizontal pressure on the block
Block-Off Time	Time when swimmer leaves the block
Touch 1	First touch
Reaction time	Time when swimmer effects the first horizontal pressure on the block
Relay-Takeoff-Time	Time from touch to release of the block
Touch 2	.....

Each lane needs:
- Touchpad
- Starting Block with relay sensor

The touchpad is mounted on the side of the starting block.

Channels:

```
Start Impulse ........................... C0 .............. is for starting purpose:
Lane 1 – Starting Block ............ C2 .............. socket of lane 1
Lane 1 – Touchpad .................. C1 .............. touchpad of lane 1
Lane 2 – Starting Block ............ C4 .............. socket of lane 2
Lane 2 – Touchpad .................. C3 .............. touchpad of lane 2
```

```
ID:        1/1
Freestyle
T:02 Touches
START EXT
15:42:04.380
L1 SB+0.10 0.20 +0.29
L2 SB+0.13 0.34 +0.47
L2 TP 001       27.35
L2 TP Turn Time  0.86
L1 TP 001       28.17
L1 TP Turn Time  0.64
L2 TP 002     1:00.14
L1 TP 002´    1:00.45




ID:        2/1
Freestyle Relay
T:04 Touches
START EXT
15:42:04.380
L1 SB+0.10 0.20 +0.29
L2 SB+0.13 0.34 +0.47
L2 TP 001       27.35
L2 SB-0.25 0.30 +0.05
L1 TP 001       28.17
L1 SB-0.15 0.25 +0.10
```

2   Timing with Program SWIM TRAINER

2.1   Prepare the race

- Select the ID of the race by pressing the F0 button
- Select the discipline
- Select the number of touches
- You are ready to start with C0 but first you should check the dead time and setting of the edges of the channels:
    - Make sure that the channels C1 to C4 are set sensitive to both edges:
    MENU->CHANNELS->INTERNAL->EDGE
        - C0 must be set to ARROW DOWN
        - C1 to C4 must be set to ARROW UP+ARROW DOWN
    - You can set the delay time for the falling and rising edges for all channels. Channel C0 has only a falling edge. The other channels have a falling and rising edge when you want to measure the start off time and turn time.
    e.g.: MENU->CHANNELS->INTERNAL->DELAY->DELAY C1:
    If you have set the rising and falling edge of this channel you can adjust two delay times, one for each edge.

2.2   Start the race

- With an impulse of C0 you start a race (e.g. from push button with Startbeep STB1 as horn).
- LINE of PRINTER: The printer shows the daytime of this event.

Now at the startblock, the competitor presses the socket (falling edge) ==> "reaction time" and after a little time ==> "duration", the competitor jumps off the socket (rising edge) ==> "blockofftime".

2. LINE of the PRINTER:
L1 SB+0.10 0.20 +0.30
       blockofftime (= reactiontime+ duration)
     duration
   reaction time
   Only times within +/- 2.5s are considered.

3. LINE of the PRINTER (if a second lane is used)
L2 SB-0.10 0.25 +0.15 In this example the reaction time is negative ==> blockofftime = -0.10+0.25 = 0.15

Later some touchpad times may occur:

L1 TP 001   27.36 time from falling edge from the start until the falling edge of the touchpad
  Duration   0.34 time from falling edge until rising edge of the touchpad. Also known as turn-time

L1 TP 002   51.36
  LAP   24.00 beginning from the second TP a LAP-time can be calculated
  Duration 0.29

A started race can be reset by pressing th CLR button.
If you press the F3-button (ID/+1) the right index of ID (e.g. 123/13) is incremented for a new race.

DISPLAY BOARD:

Start with C0: Blockofftime is shown at the display board.

Touchpad   : totalruntime is shown (from start until falling edge of the touchpad.

If you select the discipline Backstroke:

All competitors are in the water and the touchpads are pressed down.
After the start C0 the swimmers have to leave the touchpads.
The time from falling edge of C0 until the rising edge of the touchpad is named as PAD OFF TIME on the printer.

Attention: On the RS232 or USB interface to the PC, the times look different, having an other format. But to use the TIMY2 as stand alone device, just use the print out for analysing the results.

2.3 Keypad

The TIMY2 has a weather-proof (water-proof) silicone keypad. The keypad is ideal for outdoor use. The keys are raised and have ideal pressure points. Although the TIMY2 is small in dimensions, they are easy to operate.
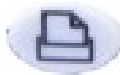
Control keys: all-purpose keys; the function of each one is always visible in the display.

START/ON: Key for manual start impulse and to switch on the TIMY2.

STOP/OFF: Key for manual stop impulse and to switch off the TIMY.

Printer: Key for paper output. If you press the combination 2nd and 🖨, you open the printer menu.

2nd: This key is always used in combination with a second key (additional function).

Menu: Key to enter the device menu.

CLR: Key to clear the marked times or to clear the memory.

Cursor: Keys to move the cursor in the display.

2nd + ▲   Beginning of a list

2nd + ▼   End of a list

OK green: Switch on, confirm commands or start inputs

OK red: Switch off, confirm commands or finish inputs

Subject to changes

Copyright by

ALGE-TIMING GmbH
Rotkreuzstr. 39
6890 Lustenau / Austria
https://www.alge-timing.com/